ICP Modelling & Mapping … (ICP M&M)

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30th TF meeting and 25th CCE Workshop

7-10 April, Roma (Italy)

hosted by ENEA

>60 participants
(M. Holmberg representing ICP IM)

2012-14 Call for Data results

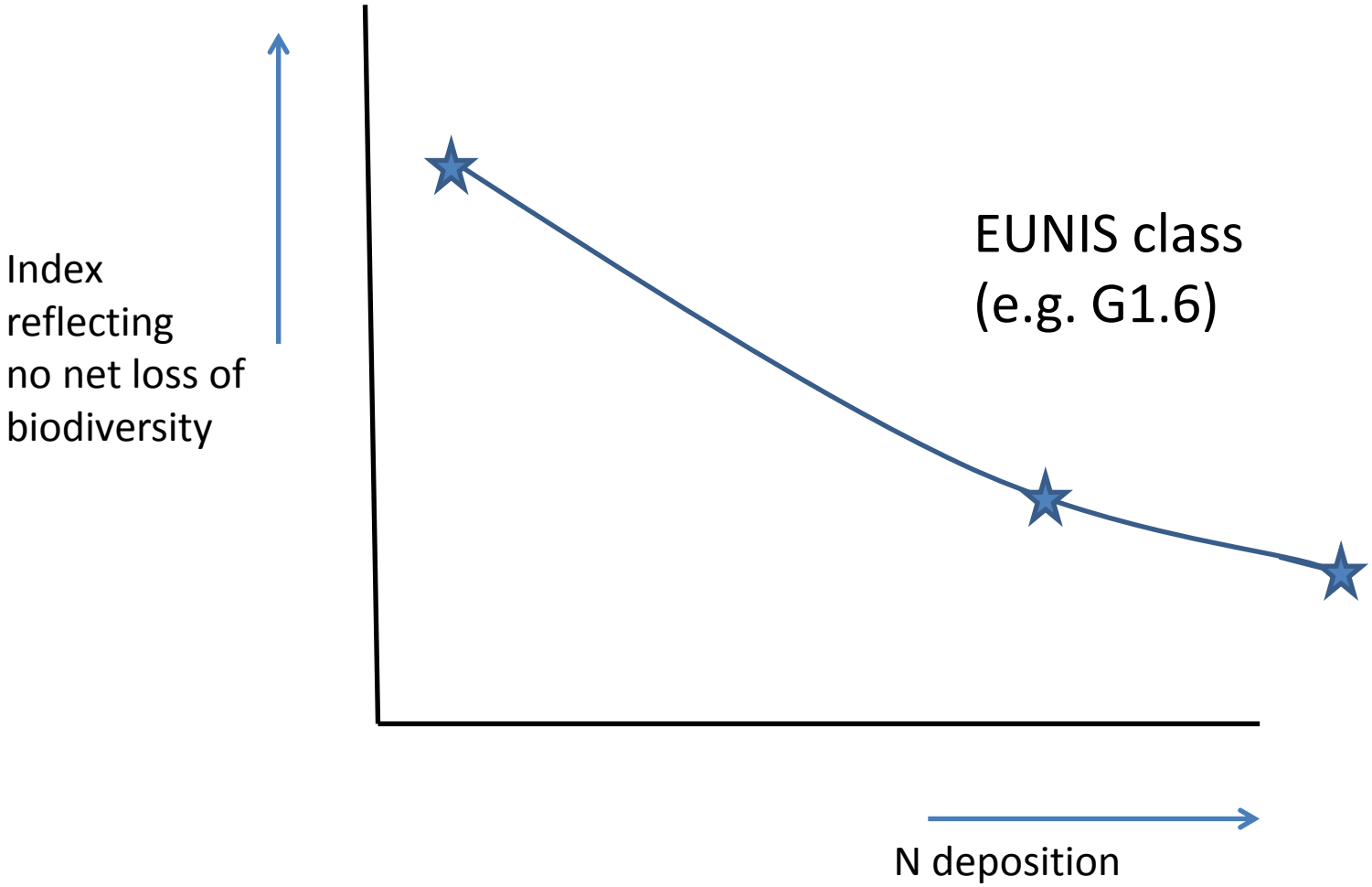
Final goal: Derive a harmonized metric from these submitted variables and indicators with the objective to quantify “no net loss of biodiversity” on a regional scale.

… then normalized by the CCE to express “no net loss of biodiversity” (NNLB) for each EUNIS class in a country.

LRTAP Long-range Transboundary Air Pollution

éclaire

From dynamic modelling for sites to regional applicable functions



LRTAP
Long-range Transboundary Air Pollution

éclaire

AT: Austria: Dynamic modelling on 8 sites, 6 with DR points
CH: Switzerland: DM: 32, DR: 189,
suggestion new CLempN for E2.3
DE: Germany: DM & DR: 5
FR: France: DM & DR: 3
GB: United Kingdom: DM & DR: 8
IT: Italy: DM & DR: 4
NL: the Netherlands: DM:17, DR: 6
SE: Sweden: update of national (empirical) critical loads
[CZ: Czech Republic: data delivered at meeting]

NFCs reported on their experiences/difficulties encountered

NFCs have till end of May to submit update
Results will be reported in 2014 CCE Status Report

New Call for Data for (updated) Critical Loads:

Reasons for Call:

1. Change in EMEP deposition grid
2. Requests for update by some NFCs
   (e.g. due to improved national knowledge)
3. New (policy-driven) emphasis on biodiversity

… to be approved by WGE

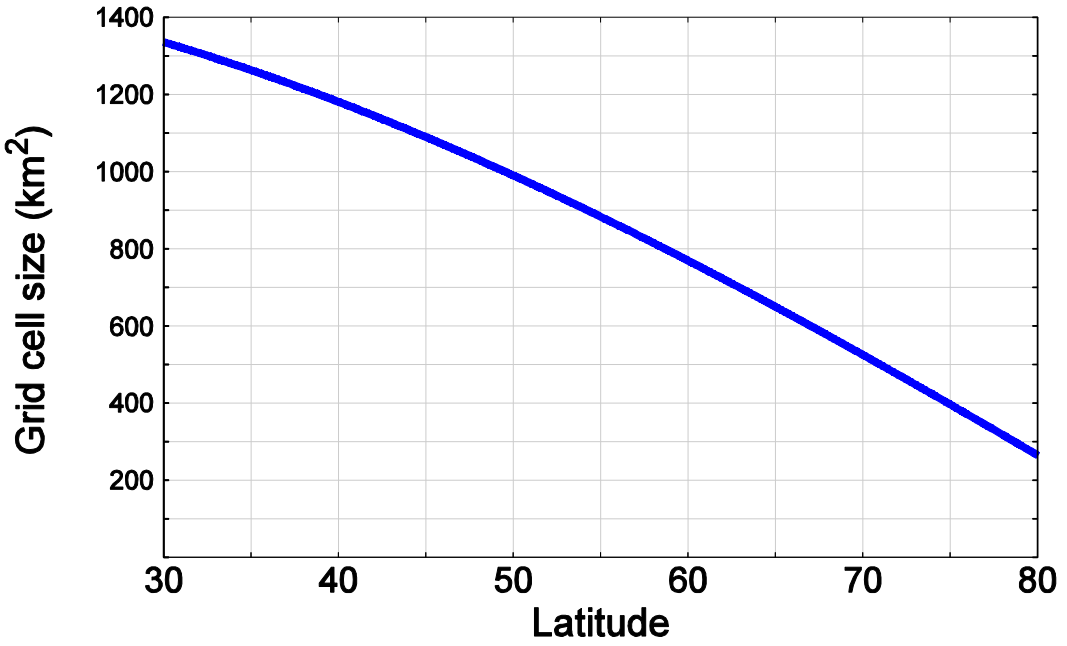
… due in 2015

Ad 1:

EMEP N and S depositions now on a longitude-latitude grid:
Grid cells of size ½° × ¼°, i.e. ~28 km (at 60°N) × ~28km

➔ the **"28 km grid"**

Size of grid cell as function of latitude:



Ad 2:

Inter alia, opportunity to provide (better) CLs for Natura2000 (and other protected) areas

Reasons 1 and 2 sufficient for a Call for Data

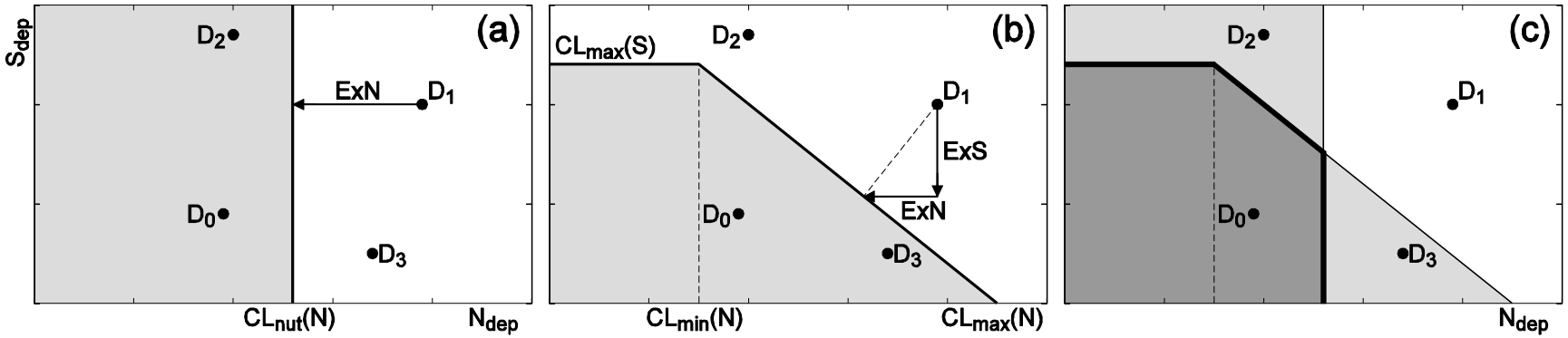
(to maintain up-to-date CL-DB for policy support)

However, biodiversity aspects ever more relevant

Thus, biodiv-related CLs are encouraged!

Level 0:

- $CL_{nut}N$ is determined from a critical [N] (or empirical CL) related to (be avoided) biodiv-change
- Acidity CL function is derived for a (e.g.) critical pH related to (be avoided) biodiv-change



➔ CLs for acidity and nutrient N combined into a ***CL function of N and S*** (dark grey area)

New Level:

Derive N and S CL function from (your favourite) biodiversity model …

e.g. PROPS, MultiMOVE, BERN, Veg, …, empirical, …

… e.g., along the following lines (using PROPS) …

Summary for Call4Data:

1. Cheap version:
Convert existing CLs to **$0.10^{o}\times0.05^{o}$ Lon-Lat-grid** and
CLaci+CLnut to 4-point N & S CLFunction

2. Intermediate version:
Revisit/update existing CLs, consider biodiversity criteria and
follow step 1

3. Ambitious version:
Use (steady-state or dynamic) biodiv model to derive N & S CLF
and follow step 1

Presentations (GB,NL,DK) and lively discussions on indicator/index of plant biodiversity change …

Agreement on index to be used by all:
(in addition to favourite/national indices)

Habitat Suitability Index (HSI)

Arithmetic mean of normalised probabilities/suitabilities/possibilities of species of interest (Lists!)

Other topics:

-- Information by Italian hosts on ongoing related projects (incl GAINS Italy)
-- Information by ICPs on their activities
-- Presentations by Chair TFIAM on costing ecosystems, and
-- CIAM on use of indicators (ECLAIRE) …

Thank You! ☺